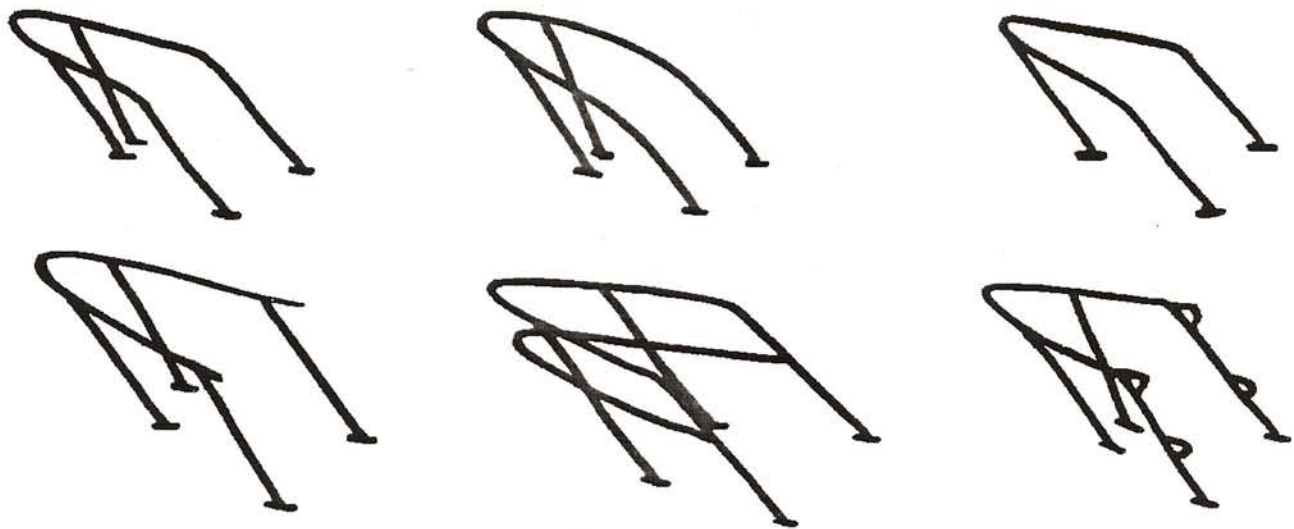


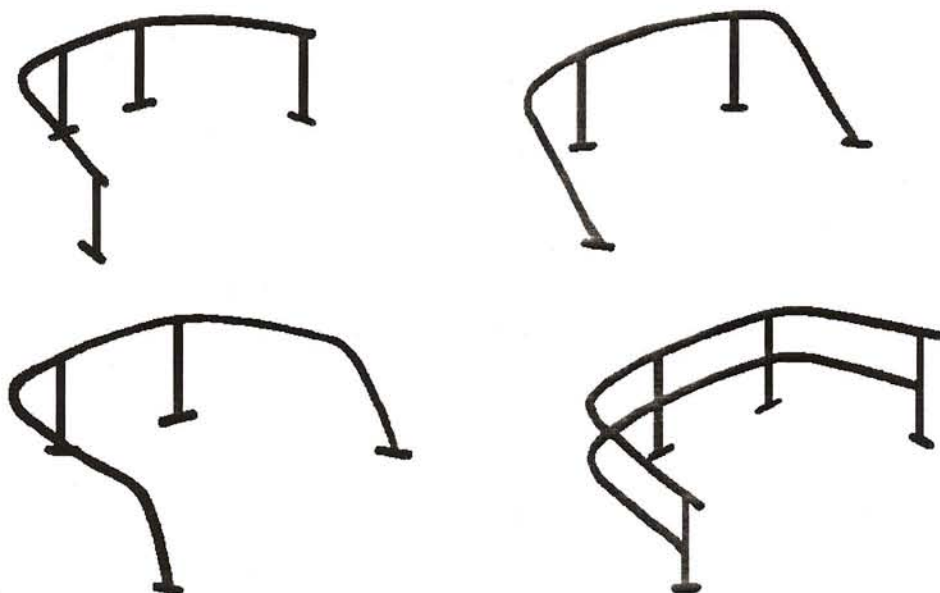
HOW TO MEASURE FOR SAFETY RAILS

Below are some simplified drawings of several styles of bow pulpits, stern rails, and stanchions. Indicate which style you prefer. If a style other than one of these is desired, please, send a simple drawing. Any of the styles below can be made with a double rail.

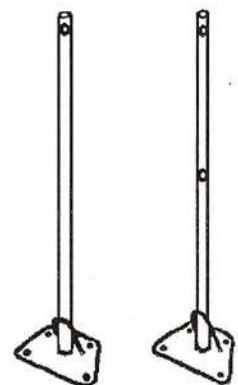
BOW



STERN



STANCHIONS



SINGLE DOUBLE

These measurements are extremely important !!

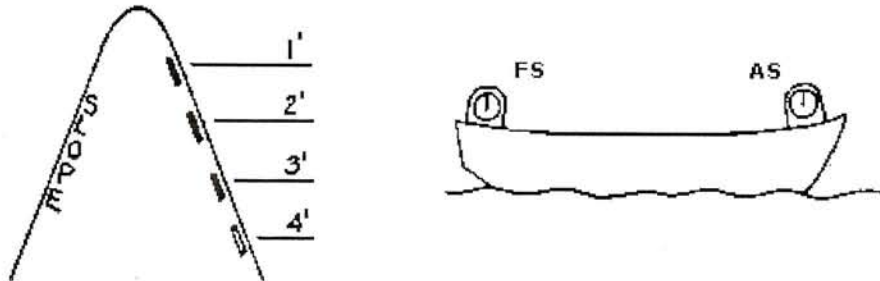
To determine the angle of the stanchion and pulpit pads

Measure the "SLOPE" and "ROLL" at each one-foot interval. Slope and roll are most easily and accurately measured with an "angle finder". We will sell one to you if you cannot get one and we'll buy it back when you are finished with it.

SLOPE is the angle of the sheer of the deck. It is measured on a line parallel to the edge of the deck. There are two kinds of slope:

- 1) Aft Slope (AS) – if water on the deck runs aft and
- 2) Forward Slope (FS) – if the water runs forward.

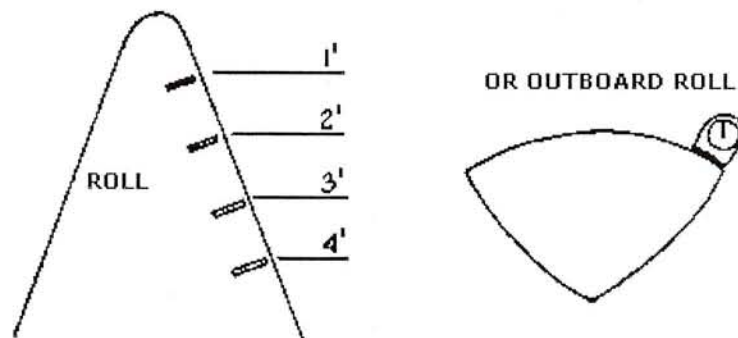
Measure both sides of the boat.



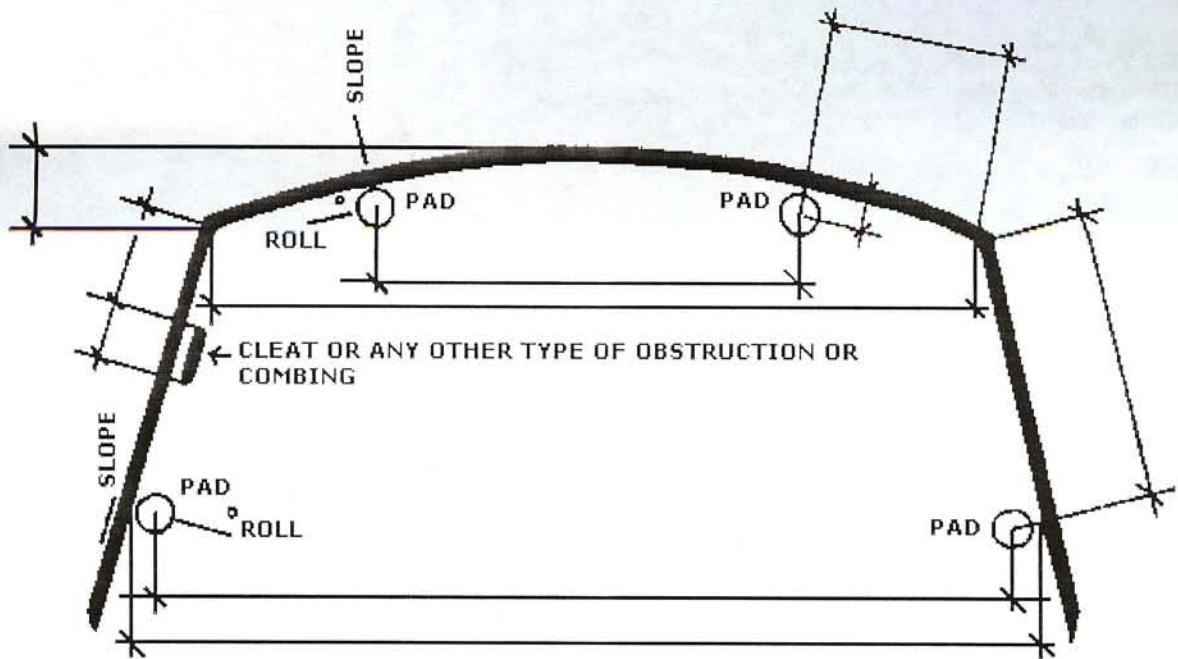
ROLL is the camber of the deck. It is measured on a line perpendicular to the edge of the deck. There are two kinds of roll.

- 1) Outboard Roll (OR) – if water runs off the side of the deck and,
- 2) Inboard Roll (IR)- if water runs toward the center of the boat.

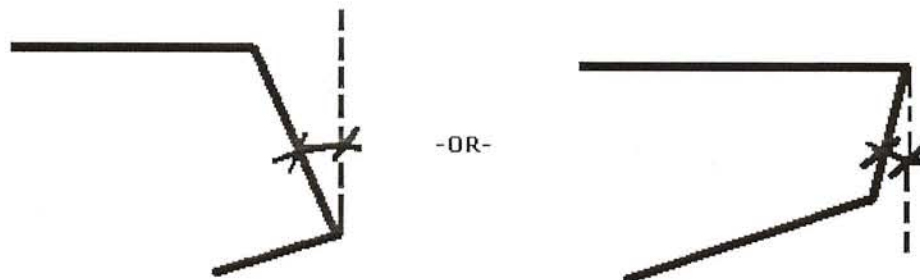
Measure both sides of the boat.



Fill in the following measurements for a Stern Rail:

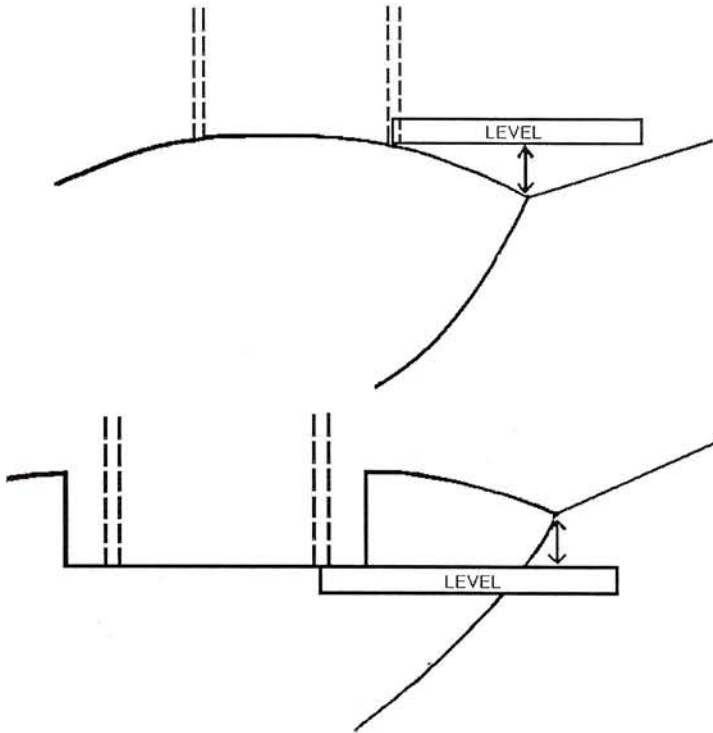


Measure the slope and roll angles at one-foot intervals as far forward as the stern rail will cover.



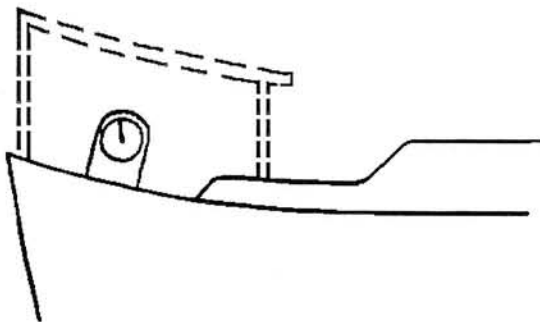
Measure profile of the stern

The stern rail looks best when it follows the shear line of the boat. To facilitate this, the forward stanchions of the rail usually have to be a different length than the aft stanchions because of the camber in the deck, combings, etc... Therefore, the following measurements are necessary.



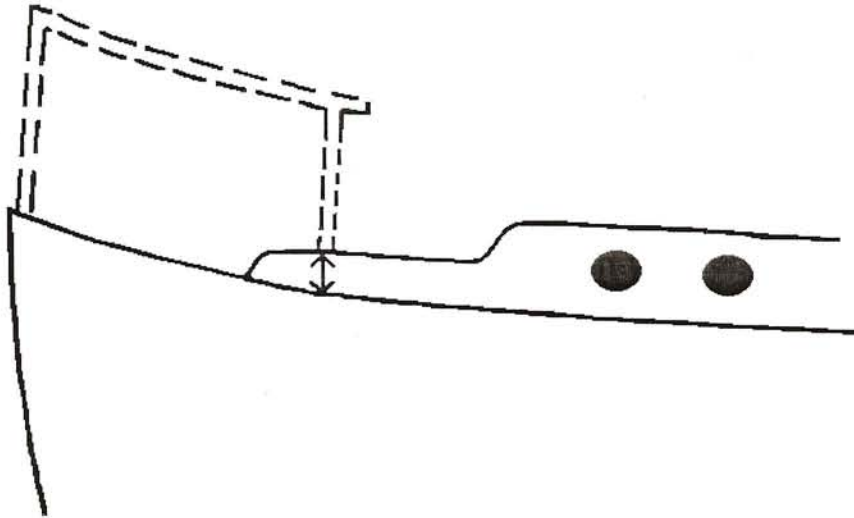
Reference the aft landing spot with the edge of a level over to the corner of the boat and measure the difference. Measure both sides of the boat and average the two.

Always use the corner of the stern as a reference point for these measurements:



IMPORTANT: Measure the angle of the shear line with the angle gauge as shown.

If there is a combing under the forward landing spot, provide the measurement of the height from the top of the deck to the top of the combing.



When you have acquired all of the necessary measurements you can send your information via:

Mail: Railmakers, Inc.
864 W 18th Street
Costa Mesa CA 92627

Fax: (949)642-8066

Email: ~~_____~~

THANK YOU !

Please answer the following questions:

Name	
Address	
Phone#	Fax#
Email <u>if</u> preferred communication	

- 1) Make and year of boat? _____
- 2) Height of the rail? _____
- 3) Single or double rail? _____
 If it is to be a double rail, what is the ***center to center*** measurement between the top rail and the 2nd rail? _____
- 4) Single or double lifelines? _____
 If the rail is to be made for double lines, what is the ***center to center*** measurement between the lines? _____
- 5) Any additional hardware, such as a light bracket or halyard bails to be added to the rail? _____
 If so, indicate the ***dimensions of the hardware*** and where it is to be placed on the rail. _____
- 6) Any pad landing area less than 3" wide? _____
 If so, give the dimensions. _____

Give us the following information for a bow pulpit:

Measure the width of the deck, inside the toe rail, at 1 foot intervals, as far back as the rail will cover. (See drawing)

Show location of head stay and give measurements (how far back)

